

REMARKS

This paper is submitted in response to the Final Office Action dated November 28, 2005 and in connection with a Request for Continued Examination (RCE). A request for a three month extension of time has been submitted concurrently herewith. Therefore, the period of response extends up to and includes May 28, 2006. Reconsideration and allowance of all pending claims by the Examiner are respectfully requested. Authorization to charge the \$395.00 requisite RCE fee and the \$510.00 Extension of Time fee is included in the Electronic Fee Sheet attached.

In the subject Office Action, claims 1, 27-28 and 65 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,748,330 to Wang (Wang), and claims 8, 12 and 46-47 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,631,748 to Harrington (Harrington). In addition, claims 2, 5 and 42 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Wang in view of U.S. Patent No. 5,729,632 to Tai (Tai); claims 7, 14, 19 and 73 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Wang in view of U.S. Patent No. 5,828,463 to Delabastita (Delabastita); claims 3 and 30-31 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Wang in view of U.S. Patent No. 5,696,604 to Curry (Curry); claim 4 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Wang in view of Curry and U.S. Patent No. 5,982,989 to Broddin (Broddin); claims 9, 43, 45, 48-49, 60-62, 64, 68-69, 71 and 75-76 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Harrington in view of Tai; claim 11 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Harrington in view of Curry, Broddin and U.S. Patent No. 5,627,919 to Kemmochi (Kemmochi); claim 13 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Harrington in view of Delabastita; claims 15, 20, 22, 25 and 74 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Wang in view of Delabastita and Curry; claim 16 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Wang in view of Delabastita, Curry, Broddin and Kemmochi; claims 17-18 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Wang in view of Delabastita and Tai; claims 21 and 24 were rejected under 35 U.S.C. § 103(a) as being

unpatentable over Wang in view of Delabastita, Curry and Tai; claim 23 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Wang in view of Delabastita, Curry and Broddin; claim 26 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Harrington in view of U.S. Patent No. 4,196,451 to Pellar (Pellar); claims 33-37, 39-41, 44, 50-52, 54-58 and 67 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Harrington in view of Delabastita in view of Tai; claims 53 and 59 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Harrington in view of Delabastita, Tai and Kemmochi; claims 63 and 70 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Harrington in view of Tai and Curry; claim 66 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Wang in view of Kemmochi; and claim 72 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Harrington in view of Tai and Delabastita.

Applicant respectfully traverses the Examiner's rejections to the extent that they are maintained. Applicant has amended claims 8, 46, 47, 60, 68 and 75 in deference to the Examiner's suggestions. Applicant respectfully submits that no new matter is being added by the above amendments, as the amendments are fully supported in the specification, drawings and claims as originally filed.

As an initial matter, Applicant wishes to thank the Examiner for the courtesy extended in the personal interview between the Examiner and Applicant's representative on January 31, 2006. In the interview, proposed amendments to the claims to address the art-based rejections were discussed. The Examiner agreed to consider the amendments in due course.

Now turning to the subject Office Action, and more particularly to the rejection of independent claim 1, this claim generally recites a method for producing a halftone image, said method comprising overlapping at least a portion of a first dot of a halftone cell of a halftone screen with at least a portion of a second dot of said halftone cell of said halftone screen.

As discussed during the interview, Wang is not directed to halftone dots as claimed, but is rather directed to the "spots" that are accumulated to create halftone dots

(col. 4, lines 4-7, col. 1, lines 39-40). Wang's disclosure is directed to the pixel level (as described in Applicant's background at the top of pg. 2), not the halftone dot level, as claimed (col. 6, though 2-27). As such, the cited portions of Wang merely disclose and suggest overlapping spots to calibrate and create a halftone dot, not to overlap halftone dots. Reconsideration and allowance of claim 1, as well as of claims 2-5, 6-13, 42-43 and 65-66 that depend therefrom, are therefore respectfully requested.

Independent claim 8 has been amended to include that the first and second dots are included within the same halftone screen. Harrington uses multiple halftone screens, not the same screen, as claimed (col. 3, lines 5-7). Reconsideration and allowance of claim 8, as well as of claims 9-13 that depend therefrom, are therefore respectfully requested.

Independent claim 14 is basically a printing plate implementation of the method of claim 1 and is therefore allowable for at least those reasons discussed above in connection with claim 1. Wang does not suggest overlapping halftone dots, but rather calibrating spots to create a halftone dot. Delabastita does not suggest such overlapping of halftone dots, either. Reconsideration and allowance of claim 14, as well as of claims 15-19 and 73 that depend therefrom, are therefore respectfully requested.

Regarding independent claim 20, none of the cited prior art includes dissimilar halftone dots within a common halftone cell of a common halftone screen. Wang, in particular, neither suggests nor motivates only spot calibration for creating a single halftone dot. Reconsideration and allowance of claim 20, as well as of claims 21-25 that depend therefrom, are therefore respectfully requested.

Applicant respectfully traverses any assertion that the fold function recited in claim 26 is obvious or suggested by the prior art. Applicant could not find any reference showing such a function in the cited art. The claimed fold function enables many of the other claimed features that improve over conventional halftone techniques. Applicant requests the allowance of claim 26.

Independent claim 27 is basically a program product implementation of the method of claim 1 and is therefore allowable for at least those reasons discussed above in

connection with claim 1. Reconsideration and allowance of claim 27, as well as of claim 28 that depends therefrom, are therefore respectfully requested.

Independent claim 30 recites a program configured to place dots within a halftone cell of a screen, wherein the dots have dissimilar characteristics. As discussed above, Wang does not disclose or suggest halftone dots, but rather spots used to create the claimed halftone dots on a pixel level. Curry does not suggest halftone dots within the same cell. As such, a combination would at best suggest calibrating spots used to create halftone dots, which could be separately oriented. Reconsideration and allowance of claim 30, as well as of claim 31 that depends therefrom, are therefore respectfully requested.

Independent claim 45 recites a printing system that includes a plurality of dots on a single halftone screen. The halftone dots have different line frequencies. Harrington uses multiple halftone screens, not the same screen, as claimed (col. 3, lines 5-7). Likewise, Tai combines different screens to create frequency affects (col. 8, lines 18-20 col. 10, lines 7-10 and col. 5, lines 45-48). As such, a hypothetical combination would fail to suggest a plurality of frequencies created on the same halftone screen. Reconsideration and allowance of claim 45 are therefore respectfully requested.

Independent claim 46 is basically a system claim of the method of claim 8, and is consequently allowable for at least the same reasons. Reconsideration and allowance of claim 46 are therefore respectfully requested.

Independent claim 47 recites dots within the same halftone screen. Because Harrington uses multiple screens (and not dissimilar halftone dots within the same cell of the same halftone screen), reconsideration and allowance of claim 47 are therefore respectfully requested.

Independent claim 48 is basically a program product claim of the system of claim 45. It is therefore allowable for at least the same reasons as stated in connection with claim 45. Because Harrington and Tai use multiple screens, reconsideration and allowance of claim 48, as well as of dependent claim 49, are therefore respectfully requested.

As amended, claim 60 recites that the threshold array comprises multiple halftone dots included within a halftone cell of a halftone screen. As discussed above, Harrington and Tai uses multiple screens. As such, the cited prior art does not suggest or motivate the claimed features. Reconsideration and allowance of claim 60, as well as claims 62-64 that dependent upon claim 60, are therefore respectfully requested.

Claims 68 and 75 are respectively apparatus and program product versions of the method of claim 60. These claims are therefore patentable for substantially the same reasons. Reconsideration and allowance of these claims, as well as of those that depend from them, are therefore respectfully requested.

In summary, Applicant respectfully submits that all pending claims are novel and non-obvious over the prior art of record. Reconsideration and allowance of all pending claims are therefore respectfully requested. If the Examiner has any questions regarding the foregoing, or which might otherwise further this case onto allowance, the Examiner may contact the undersigned at (513) 241-2324. Moreover, if any other charges or credits are necessary to complete this communication, please apply them to Deposit Account 23-3000.

Respectfully submitted,

May 30, 2006

/Douglas A. Scholer/

Date

Douglas A. Scholer
Reg. No. 52,197
WOOD, HERRON & EVANS, L.L.P.
2700 Carew Tower
441 Vine Street
Cincinnati, Ohio 45202
Telephone: (513) 241-2324
Facsimile: (513) 241-6234